

November 5 - 18, 2004

On 11/15/04, an Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) Short Wavelength Infrared (SWIR) Capillary Pump Heat Transfer (CPHT) meeting was held to discuss the feasibility/impact of one more CPHT setpoint change. This change is in effort

to mitigate the SWIR temperature rise back on 09/25/04. The consensus of the group (including 3 Goddard thermal engineers and 1 expert from Lockheed Martin) was a -1.5 degree C CPHT setpoint change would not compromise system stability and would provide additional cooling to SWIR. This consensus is being relayed to the ASTER science team for their input.

The third Terra re-engineering meeting was held on 11/16/04. Lockheed/Martin presented Terra SSR management information including possible and probable techniques for SSR automation. Next meeting he plans to refine his list of SSR anomalies by prioritizing them based on science impact. Computer Sciences Corporation presented information on how telemetry data statistics are currently being collected and delivered to the EOC as well as ideas on automation.

On 11/17/04, a MOMS transition meeting was held to discuss anomalies and trends for Terra, Aqua, and Aura. Various Honeywell and LM personnel were in attendance.

A Mission Impact Report (MIR) was generated regarding bad data packets received during an ASTER playback. Replay of data at the GSIF showed same bad packets. Subsequent replay of data from the spacecraft again showed this problem. There are estimated to be 4,000 EDUs of ASTER data lost. This loss is being investigated.

Two Mission Impact Reports (MIRs) occurred this week having to do with MISR data lost due to several factors. On day 318, there were three 'short' contacts that occurred in succession. Short meaning 10-15 minutes as opposed to ~18 minutes nominal. During the first contact of the series, both MODIS and MISR buffers were about 80% full. It was decided by the FOT to only do a partial dump of MODIS and not MISR due to the short contact time in hopes of getting MISR on the next event. During the next event, data lock was lost on a MISR partial dump. The short contact time did not afford the FOT the ability to redump. During the back orbit, the MISR buffer filled up and the MISR buffer was disabled. This caused data to be lost (1360993 CADUS total) by the time the next event occurred. A report was written and the FOT are working on amending their Standard Operating Procedures (SOPs) to correct for conditions like these in the future.